

**Poster – [A-10-624-1]****The comparison of net palem olein, hydrogenized + palem and canola oil on dyslipidemia**Jafari Laleh<sup>a</sup>, Amini Asadollah<sup>b</sup>,Ghatreh Samani Keyhan<sup>b</sup>, Koohi Habibi Dehkordi Arash<sup>a</sup><sup>a</sup>34 N, Zafar St, Saadi Gharbi St, Shahrekord, Iran<sup>b</sup>Shahrekord University of Medical Sciences, IranE-mail addresses: [jafarilaleh@yahoo.com](mailto:jafarilaleh@yahoo.com) (J. Laleh),[SAAMINI@yahoo.com](mailto:SAAMINI@yahoo.com) (A. Asadollah),[kgsamani@yahoo.com](mailto:kgsamani@yahoo.com) (G.S. Keyhan),[Arash\\_koohi\\_ar@yahoo.com](mailto:Arash_koohi_ar@yahoo.com) (K.H.D. Arash)

**Introduction:** Palem olein is structured from meaty part of palem culture. Recent investigation showed that this oil is safe for health because consumption of palem olein not only decreases LDL but also increases HDL and prevention of hypertension by prevention of oxidative stress. In contrast other intakable oil such as hydrogenized oil may led to high bad cholesterol in human body. The aim of this study was to understand the effect of palem olein on blood fat in an animal model.

**Material and methods:** This is an experimental study that was conducted in Medical University of Shahrekord in 1389. Eighty eight Wistar rats with the same weight were provided and primary care in optimal environment for 2 weeks. Then they were randomly divided in the following 4 groups: a) control with normal diet, b) hydrogenized oil + palem + normal diet, c) net palem olein + normal diet, and d) canola oil + normal diet. All samples were feed and observed for 4 weeks and total cholesterol, triglyceride, HDL and LDL were measured at the end of intervention. The data after collection were analyzed by SPSS software and application of ANOVA test.

**Results:** The difference of every one of fat profiles mean total cholesterol, TG, LDL, HDL and LDL/HDL between four groups was statistically significant ( $P < 0.001$ ).

**Conclusion:** According to results of this study and comparison of results with other studies although palem olein probably could reduce bad cholesterol and triglyceride but other risk factors such as diet and genetic characteristics that influence on fat level must be noticed.

**Keywords:** Palem olein, Canola oil, Hydrogenized oil, HDL, LDL, Cholesterol

doi:[10.1016/j.clinbiochem.2011.08.552](https://doi.org/10.1016/j.clinbiochem.2011.08.552)

**Poster – [A-10-678-1]****Non enzymatic antioxidant status in the users of pan masala containing tobacco (PMT)**

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**Background:** The use of pan-masala containing tobacco (PMT) is increasing rapidly in countries like Nepal and India. It is a health hazard due to the presence of nitrosamines which lead to production of reactive oxygen species (ROS), thereby disturbing the oxidant/anti-oxidant balance in the body. The present study aims to find out the oxidative stress and antioxidant status in PMT users.

**Materials and methods:** A cross-sectional study was carried out by using snowball sampling technique. 50 healthy PMT users and 53 healthy individuals (non-PMT users were enrolled). Blood samples were

collected in EDTA and plain vacutainers. Vitamin C, vitamin E, and serum MDA were estimated using standard method, while uric acid, total bilirubin and albumin were estimated using diagnostic reagents from RFCL, India. The data were analysed by using Student's 't' test.

**Results:** The results showed that in PMT users, there was a significant ( $p < 0.05$ ) fall in plasma antioxidant parameters; vitamin C level ( $1.207 \pm 0.734$ ), vitamin E ( $0.791 \pm 0.232$ ), albumin ( $3.75 \pm 0.701$ ) as compared to the non PM-T user subjects and fall in uric acid level ( $4.11 \pm 1.61$ ) were not significant ( $p = 0.756$ ) as compared to non-PMT user subjects ( $4.19 \pm 1.12$ ). MDA level was significantly increased ( $p < 0.001$ ) in PM-T users ( $10.78 \pm 9.08$ ) as compared to PMT non users ( $4.58 \pm 4.36$ ).

**Conclusion:** MDA level was significantly increased in PMT users, that indicates lipid peroxidation and most of the non enzymatic antioxidant parameters were decreased so PMT users are at high risk of free radical damage which may lead to malignant transformation, cancer, CHD and others.

**Keywords:** ROS, Oxidative stress, Antioxidant, PMT

doi:[10.1016/j.clinbiochem.2011.08.553](https://doi.org/10.1016/j.clinbiochem.2011.08.553)

**Poster – [A-10-685-1]****Investigation of local probiotic bacteria as live sublingual vaccines for treatment of atopic disease in vivo**Basirnezhad Masoud<sup>a</sup>, Roozbeh Leila<sup>b</sup>, Varasteh Abdol-reza<sup>a</sup><sup>a</sup>Bu-Ali Research Institute Ferdossi Square, Bu-Ali Square Mashhad, Iran<sup>b</sup>Islamic Azad University, Nour Branch, IranE-mail addresses: [Basirnezhad.English@gmail.com](mailto:Basirnezhad.English@gmail.com) (B. Masoud),[leila\\_roozbeh@yahoo.com](mailto:leila_roozbeh@yahoo.com) (R. Leila),[varastehA@mums.ac.ir](mailto:varastehA@mums.ac.ir) (V. Abdol-reza)

**Introduction:** Probiotics are defined as live microorganisms that, when administered in adequate amounts, confer a health benefit on the host. Recently probiotics may serve as both attractive adjuvant systems for improved allergy treatment and as a new treatment approach that uses selected probiotic strains as mucosal antigen delivery vehicles for recombinant allergens.

**Materials and methods:** 6–8 weeks old inbred female BALB/c were immunized intraperitoneally with recombinant chenopodium album 2 (rche a 2) followed by aerosol challenge of 1% rche a 2. Sensitized mice were classified in 8 groups of six mice and then individual groups were treated sublingually with individual or combination of different probiotic bacteria (*Lactobacillus plantarum* and *Bifidobacterium bifidum*). After undergoing immunotherapy, blood samples were collected from all mice for IgE assays. Spleens were also excised and cells were cultured in complete RPMI medium then cell culture supernatants used for cytokine assays.

**Results:** Sensitization with rche a 2 induced high levels of IgE. We do expect elevation of Th1 cytokines profile and Tregs in groups which probiotics are used and reduction in Th2 cytokines profile.

**Conclusion:** Probiotic products are recommended to be administered in combinations, as these may be functionally more efficient than individual strains. They may reinforce Th1 type immune responses and suppress Th2 cytokines. In particular, dietary probiotics offer the potential for a cheap and safe prevention strategy against allergic disease.

**Keywords:** Probiotics, Sublingual, Atopic, Lactobacillus, Immunotherapy

doi:[10.1016/j.clinbiochem.2011.08.554](https://doi.org/10.1016/j.clinbiochem.2011.08.554)